

697.4

**MENLO**

**THE H. B. SMITH CO.**

**1225 Arch Street**

**PHILADELPHIA, PENNA.**

**CATALOG**

**No. 631**







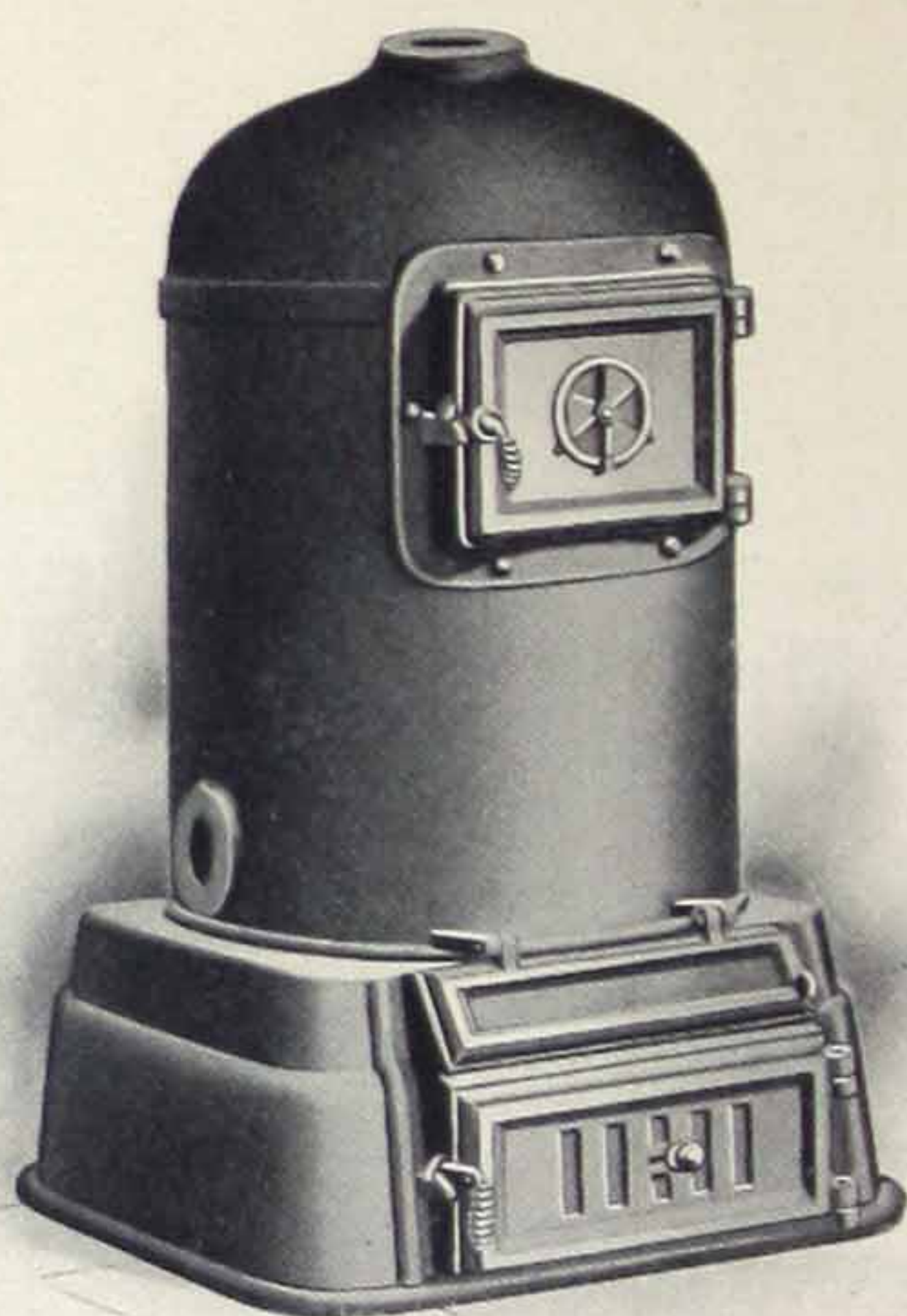
# MENLO BOILER

For  
Steam and Water  
Warming

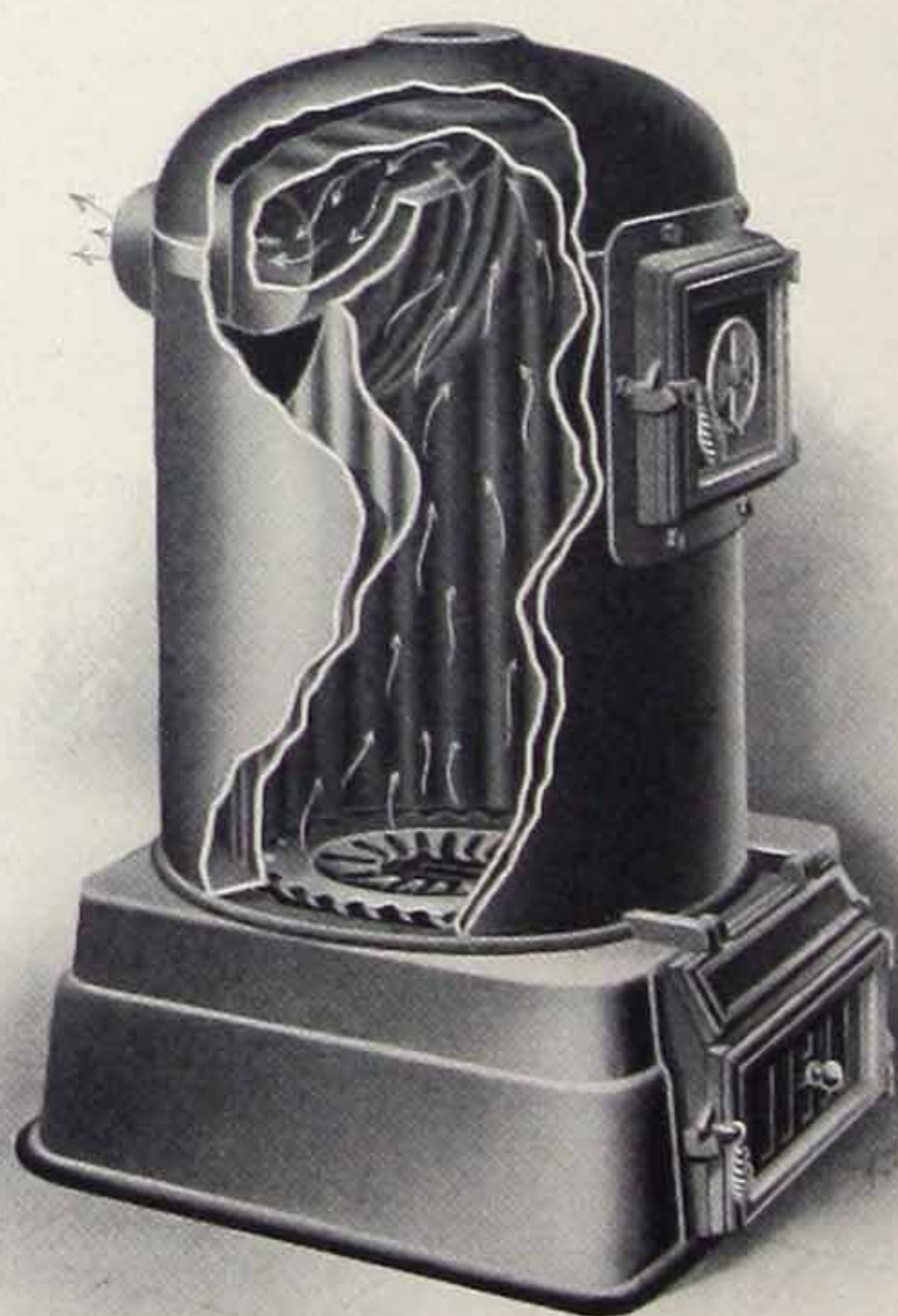
1910



# Menlo Boiler



Nos. 10, 12 and 14 Menlo Boiler

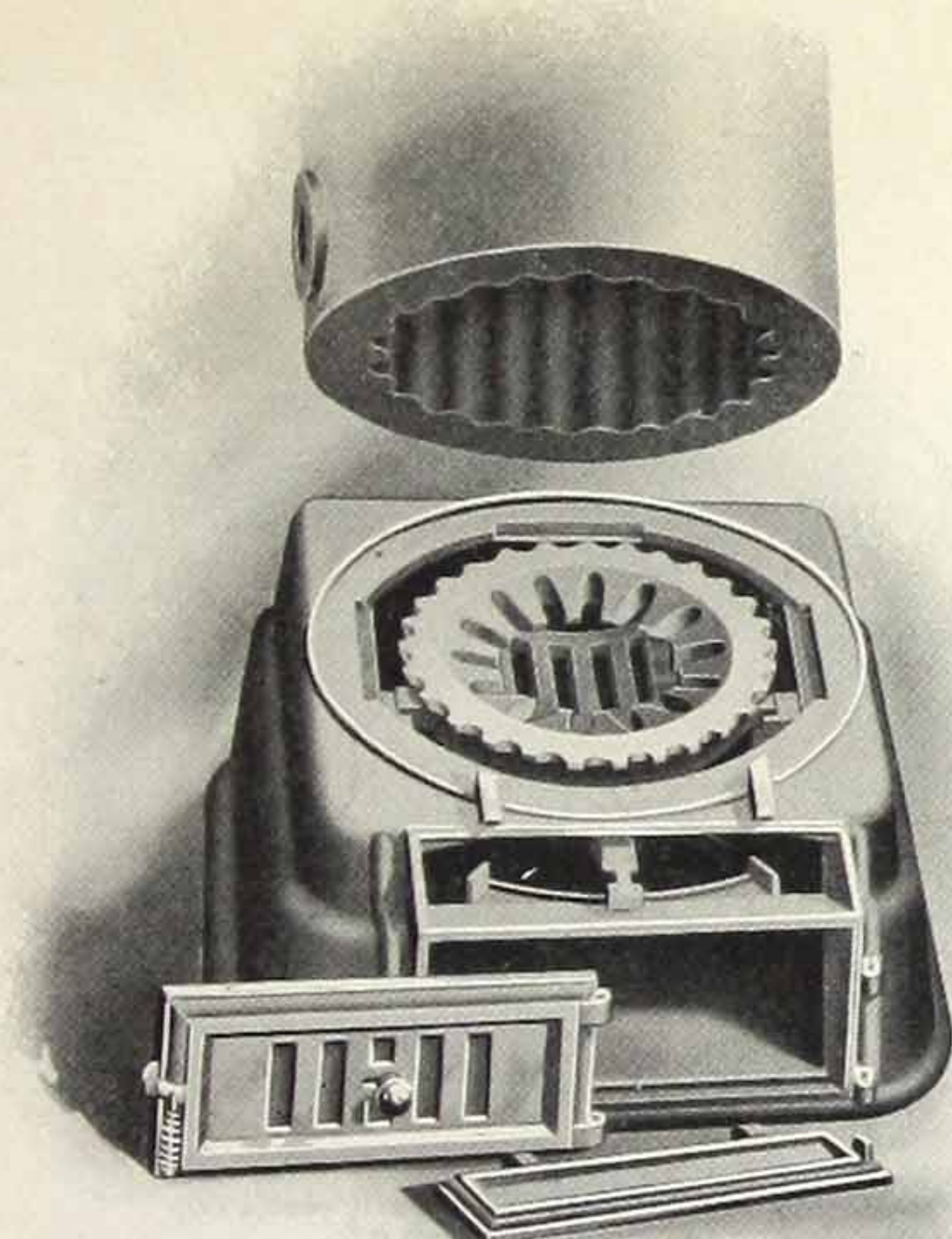


Showing Fire Travel

Nos. 10, 12 and 14 Menlo Boiler



# Menlo Boiler



Showing Ash Pit and Grate  
Numbers 10, 12 and 14 Menlo  
Menlo Water Boiler

## RATINGS

| Number | Diameter of Grate in Inches | Rating* in Feet | Price |
|--------|-----------------------------|-----------------|-------|
| 10     | 10                          | 200             | \$55  |
| 12     | 12                          | 300             | 70    |
| 14     | 14                          | 400             | 95    |

\*FOR COMPUTING SIZE OF BOILER, SEE PAGE 18.

## Menlo Tank Heater

## RATINGS

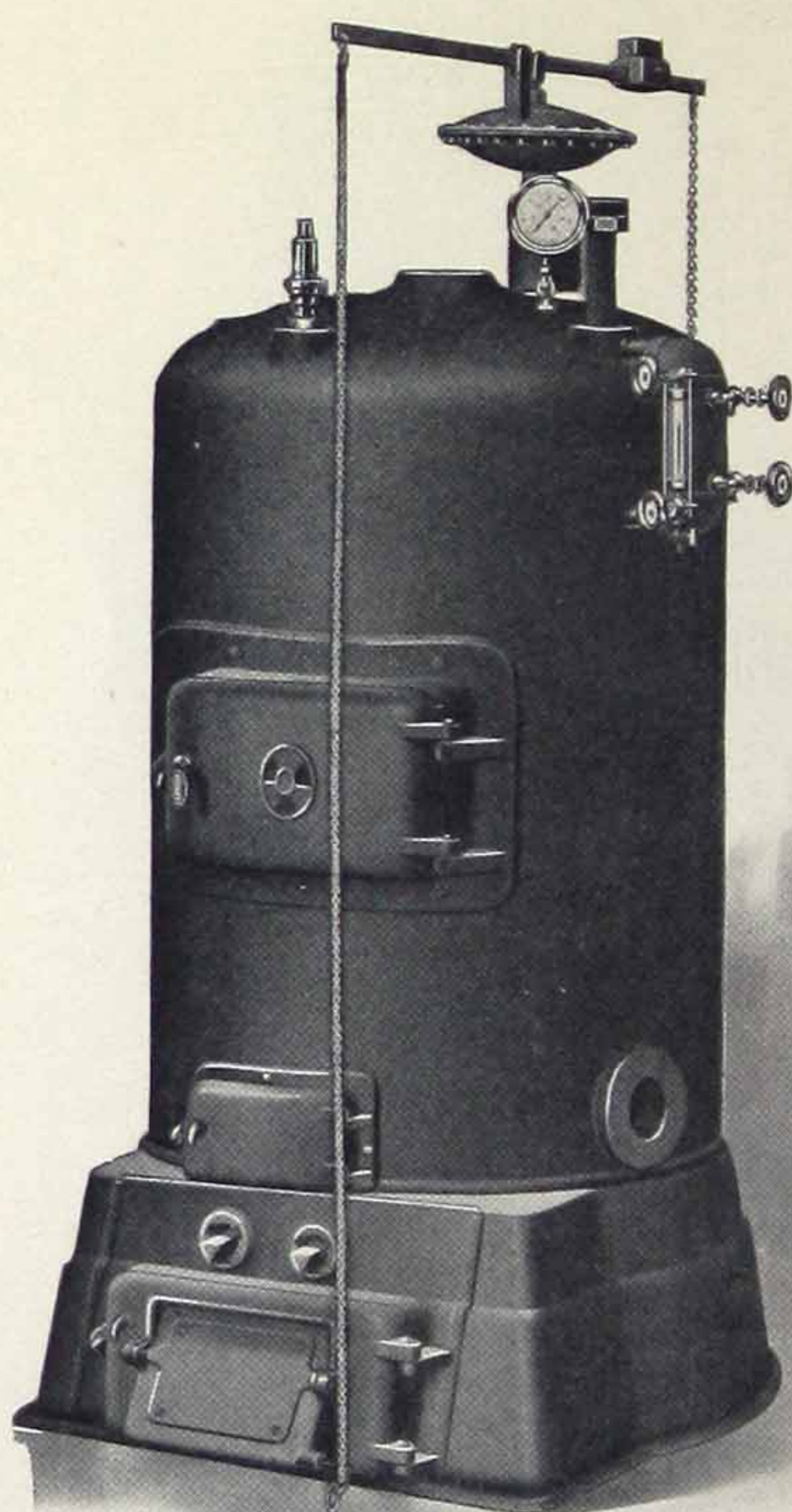
| Number | Diameter of Grate in Inches | Tank Capacity† in Gallons | Price |
|--------|-----------------------------|---------------------------|-------|
| 10     | 10                          | 225                       | \$55  |
| 12     | 12                          | 350                       | 70    |
| 14     | 14                          | 500                       | 95    |
| 16     | 16                          | 750                       | 139   |
| 18     | 18                          | 1100                      | 170   |
| 20     | 20                          | 1500                      | 206   |

†Tank capacity for various sizes of Heater for *Domestic Supply*—average conditions.

Note: Not capacity in gallons per hour to be raised from a low to a high temperature.



# Menlo Boiler



Nos. 16, 18 and 20  
Menlo Steam Boiler

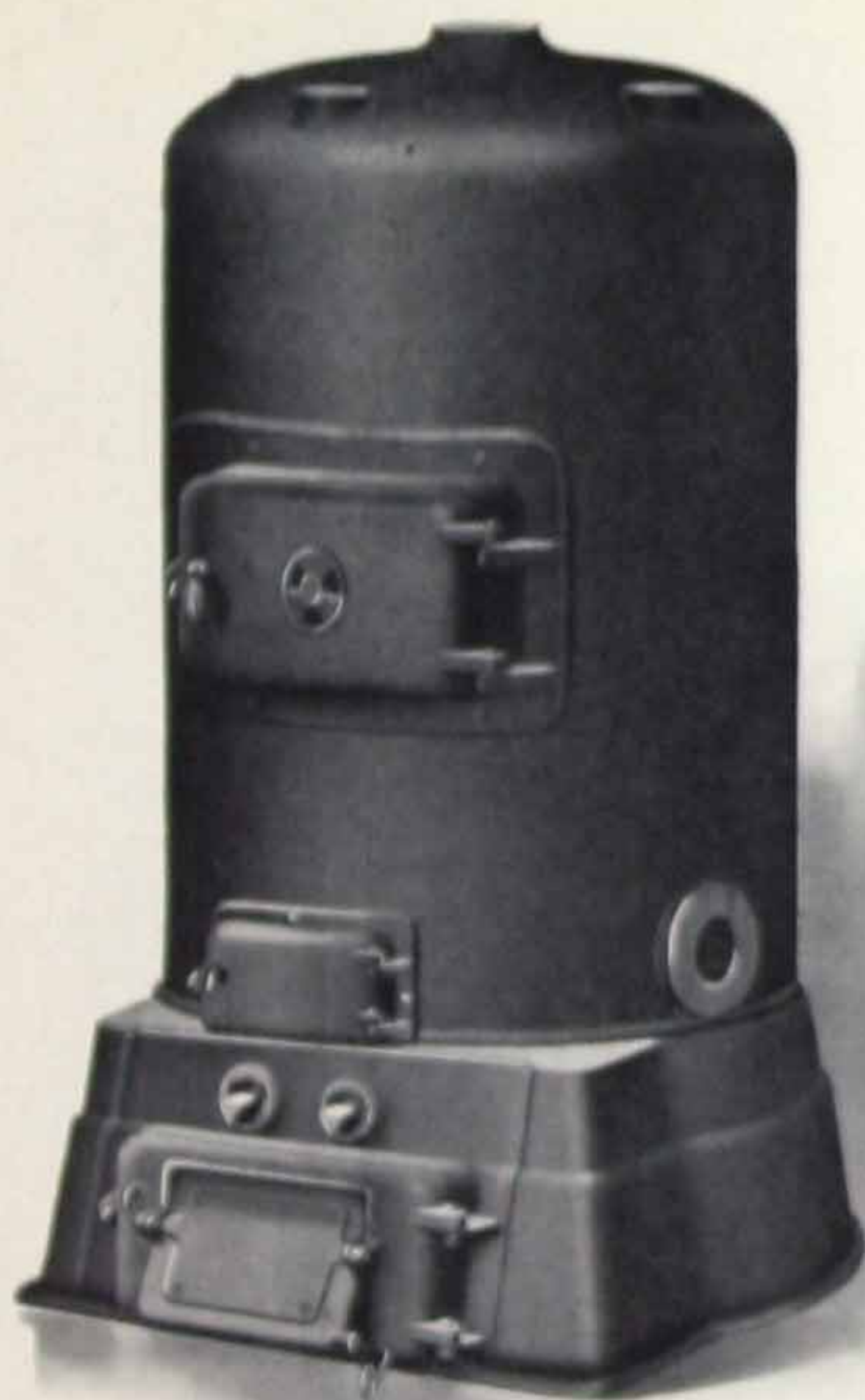
## STEAM RATINGS

| Number | Diameter of<br>Grate in Inches | Rating*<br>in Feet | Price |
|--------|--------------------------------|--------------------|-------|
| 16     | 16                             | 300                | \$149 |
| 18     | 18                             | 375                | 180   |
| 20     | 20                             | 475                | 216   |

\*FOR COMPUTING SIZE OF BOILER, SEE PAGE 18.



# Menlo Boiler



Nos. 16, 18 and 20  
Menlo Water Boiler

## WATER RATINGS

| Number | Diameter of<br>Grate in Inches | Rating*<br>in Feet | Price |
|--------|--------------------------------|--------------------|-------|
| 16     | 16                             | 500                | \$139 |
| 18     | 18                             | 600                | 170   |
| 20     | 20                             | 800                | 206   |

\*FOR COMPUTING SIZE OF BOILER, SEE PAGE 18.



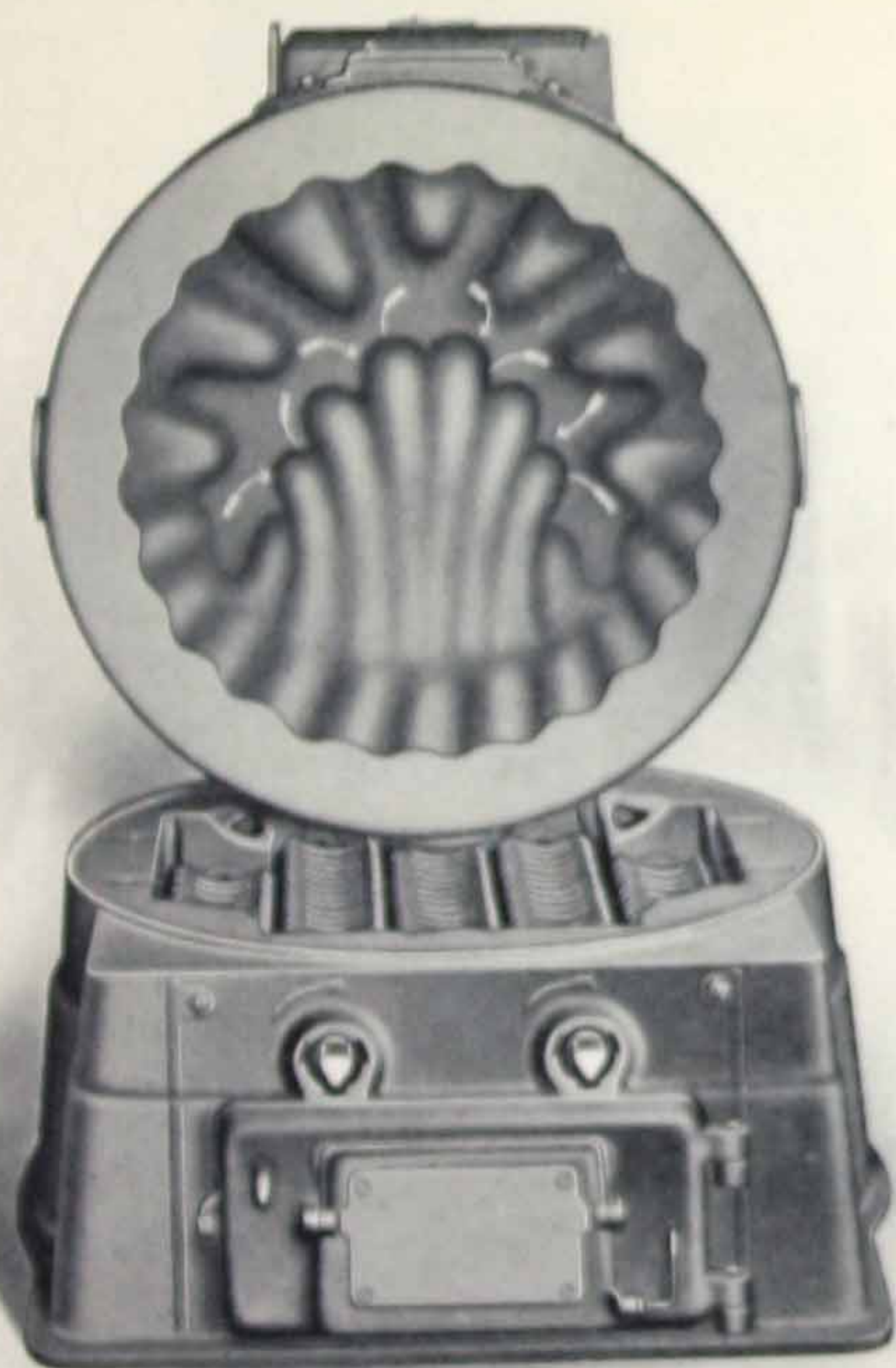
# Menlo Boiler



Showing Ash Pit and Method of Shaking  
Nos. 16, 18 and 20  
MENLO BOILER



# Menlo Boiler



Interior of Fire Pot  
Nos. 16, 18 and 20  
MENLO BOILER

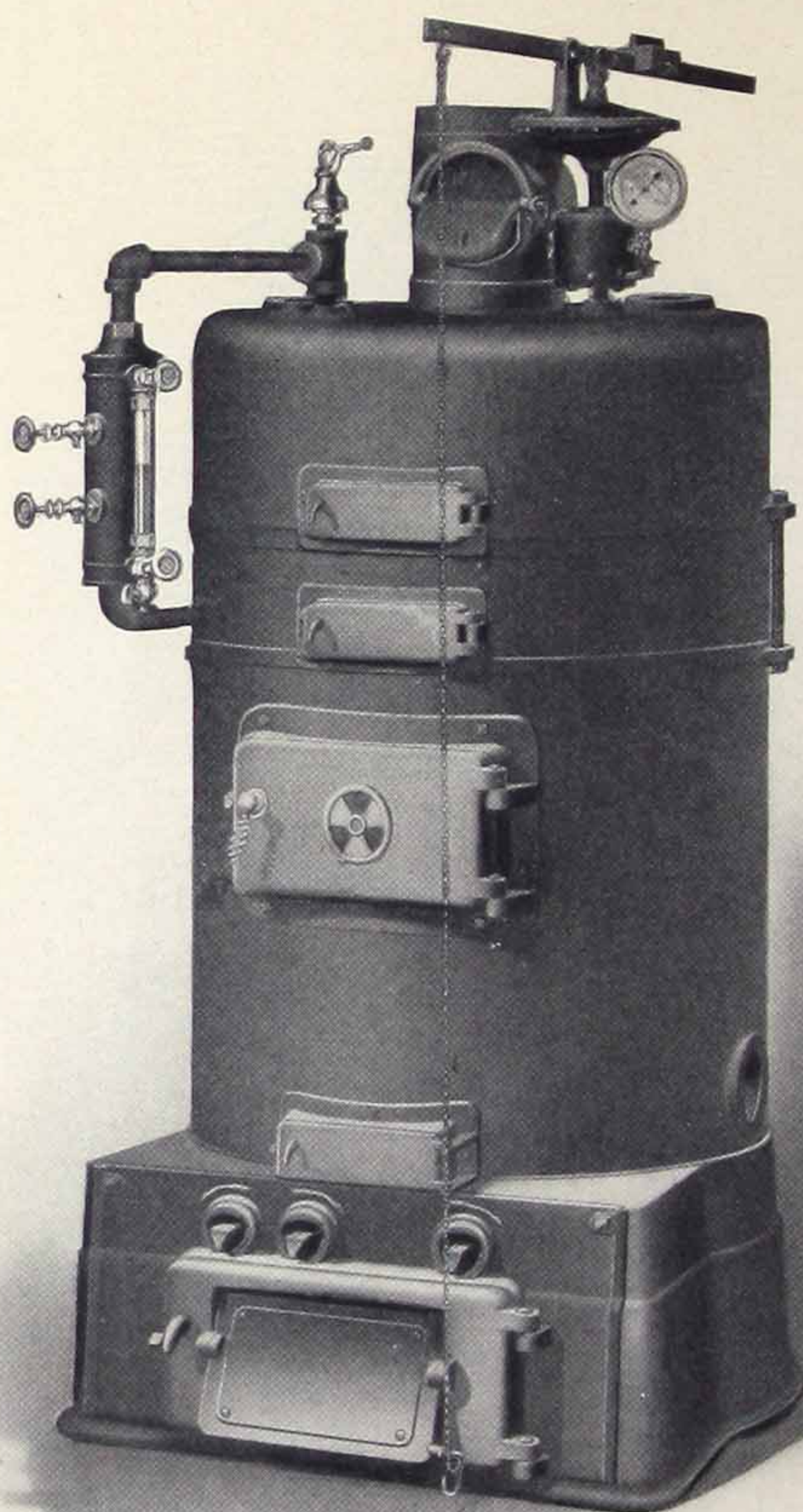
## Smoke Bonnet



Nos. 16, 18 and 20 Menlo



# Menlo Boiler



Nos. 123 and 126  
Menlo Steam Boiler  
STEAM RATINGS

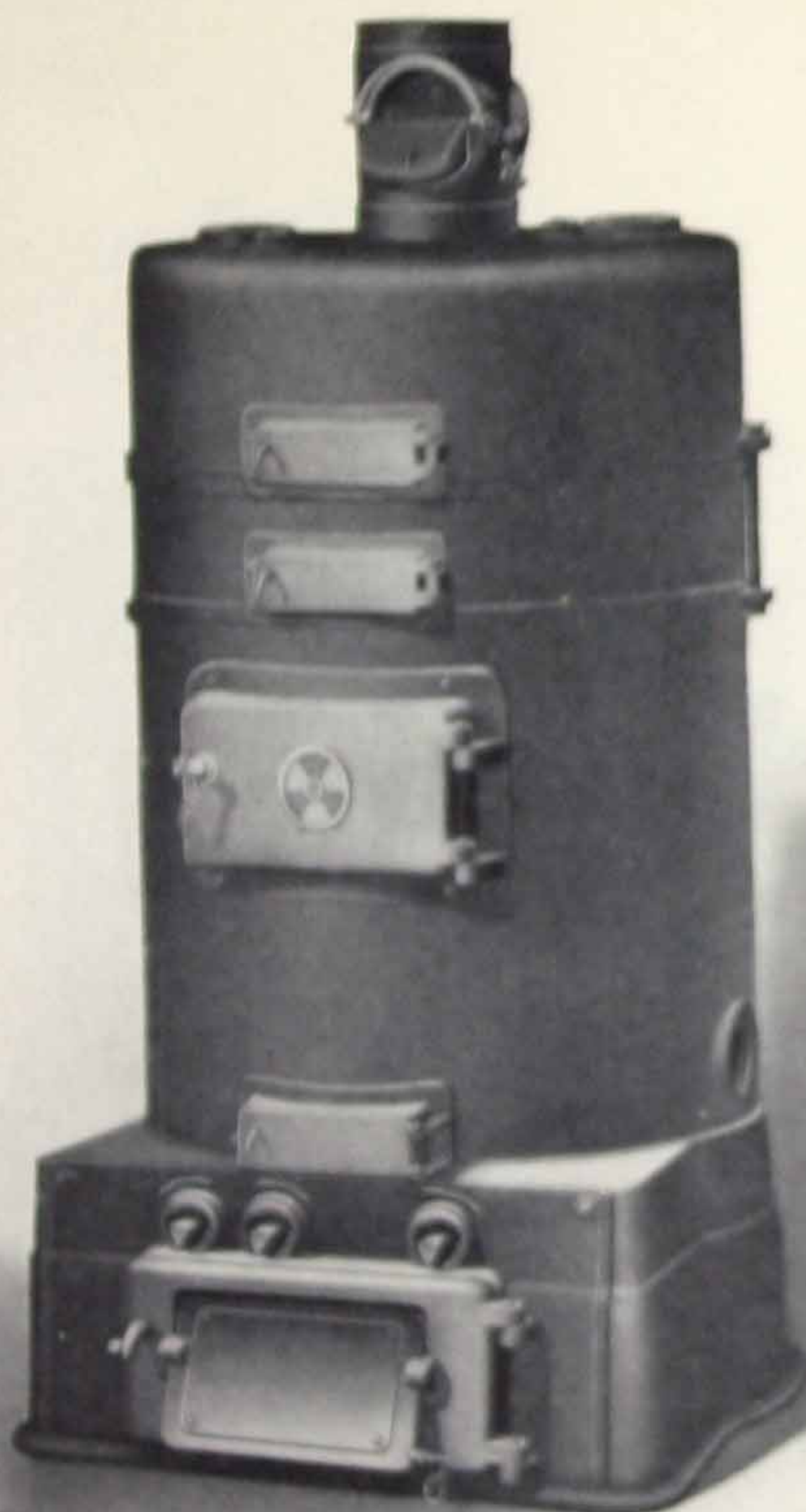
| Number | Diameter of Grate in Inches | Rating* in Feet | Price |
|--------|-----------------------------|-----------------|-------|
| 23     | 23                          | 550             | \$236 |
| 123    | 23                          | 600             | 249   |
| 26     | 26                          | 675             | 293   |
| 126    | 26                          | 750             | 316   |

Shipped Knocked Down

\*FOR COMPUTING SIZE OF BOILER, SEE PAGE 18.



# Menlo Boiler



Nos. 123 and 126  
Menlo Water Boiler  
WATER RATINGS

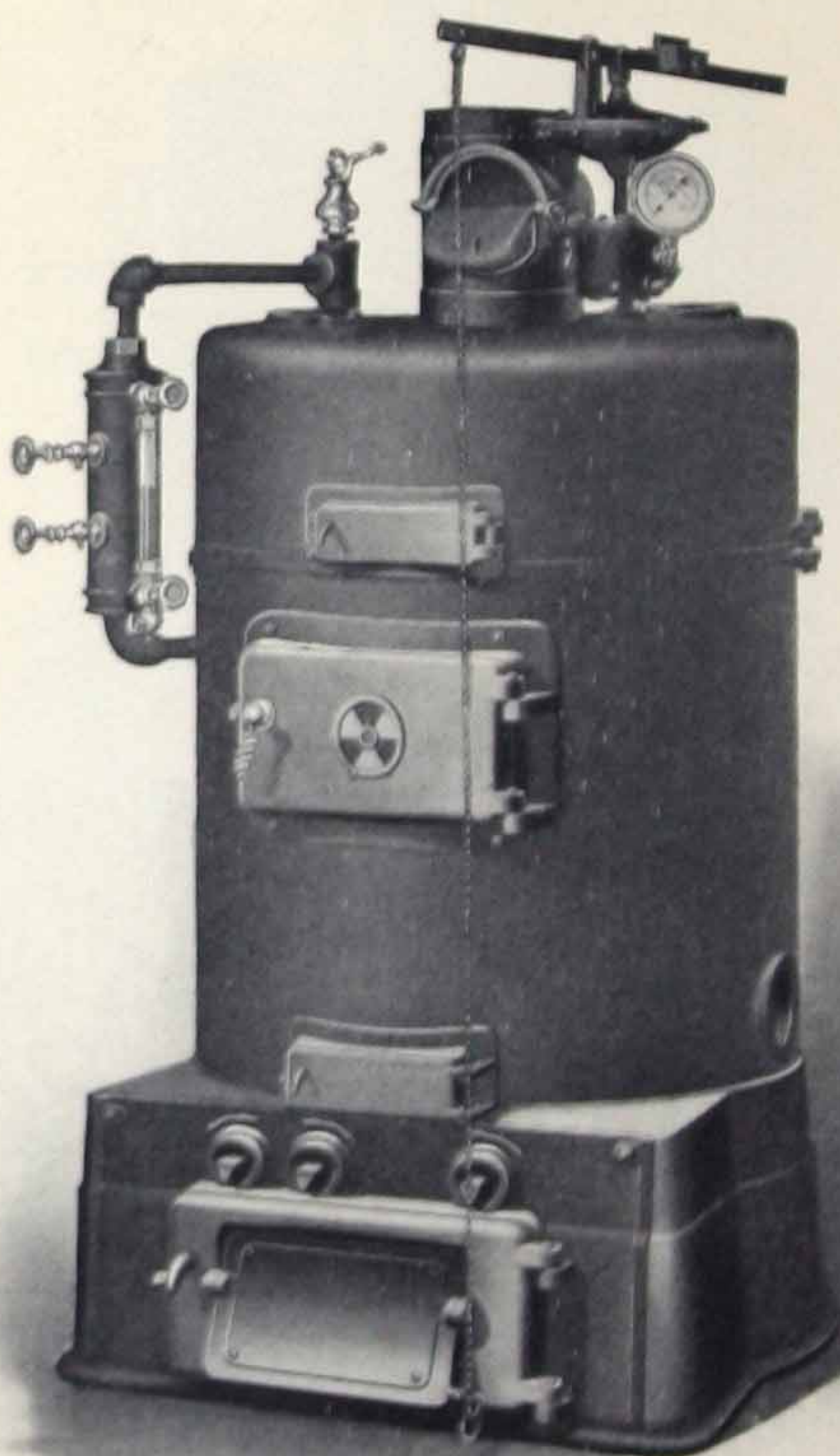
| Number | Diameter of<br>Grate in Inches | Rating*<br>in Feet | Price |
|--------|--------------------------------|--------------------|-------|
| 23     | 23                             | 900                | \$226 |
| 123    | 23                             | 1000               | 239   |
| 26     | 26                             | 1125               | 283   |
| 126    | 26                             | 1250               | 306   |

Shipped Knocked Down

\*FOR COMPUTING SIZE OF BOILER, SEE PAGE 18.



# Menlo Boiler

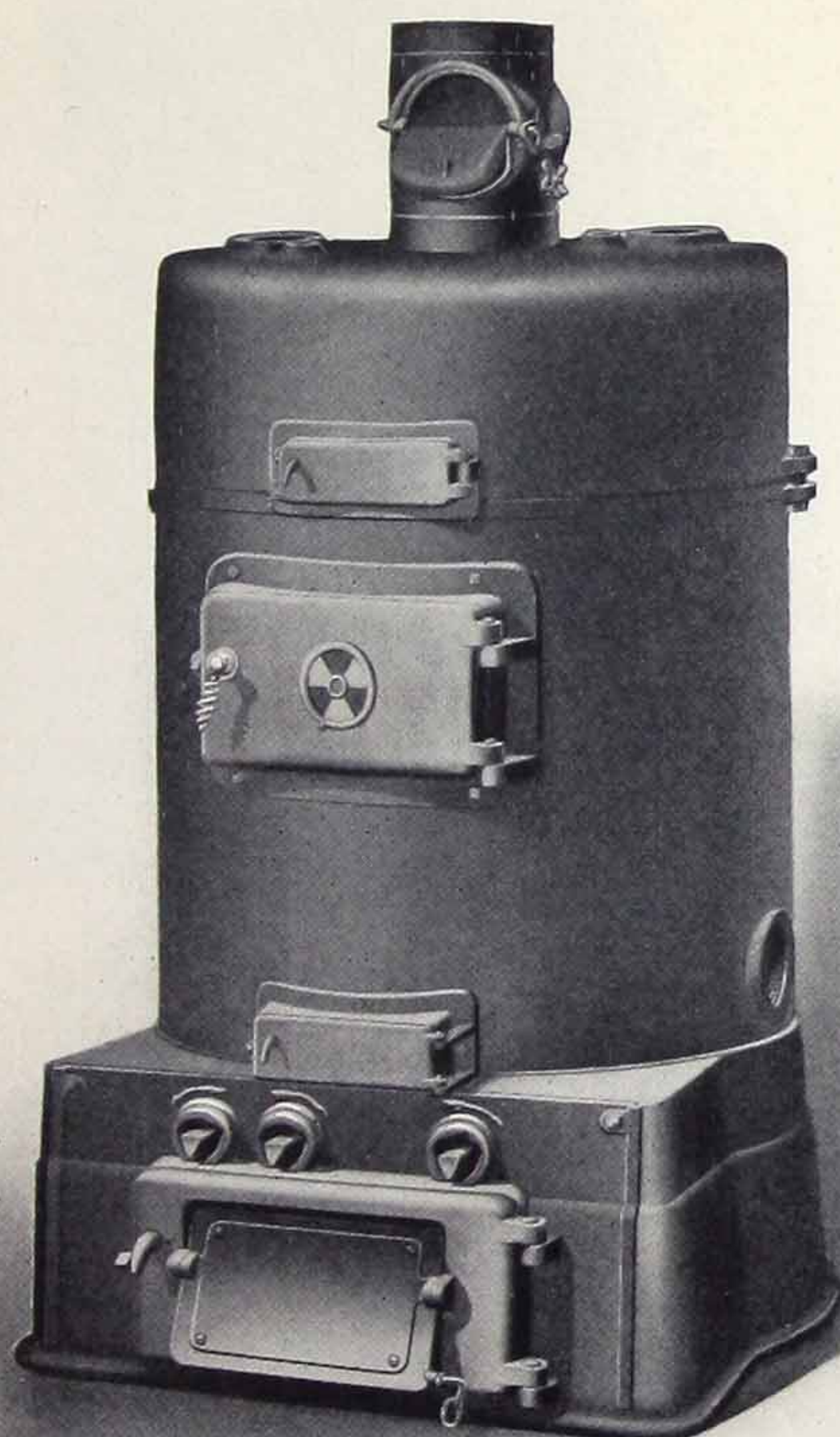


Nos. 23 and 26

Menlo Steam Boiler



# Menlo Boiler

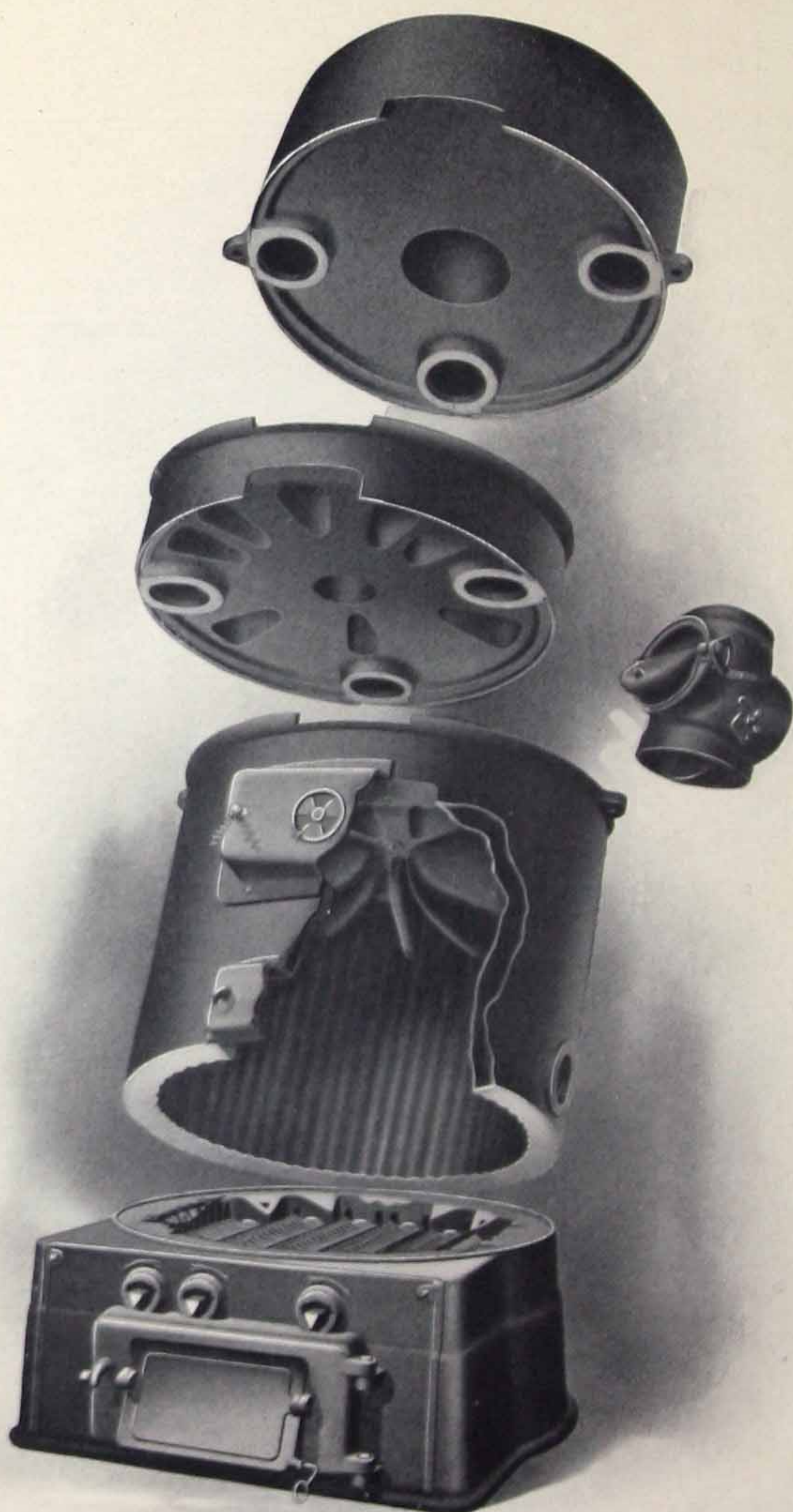


Nos. 23 and 26

Menlo Water Boiler



# Menlo Boiler



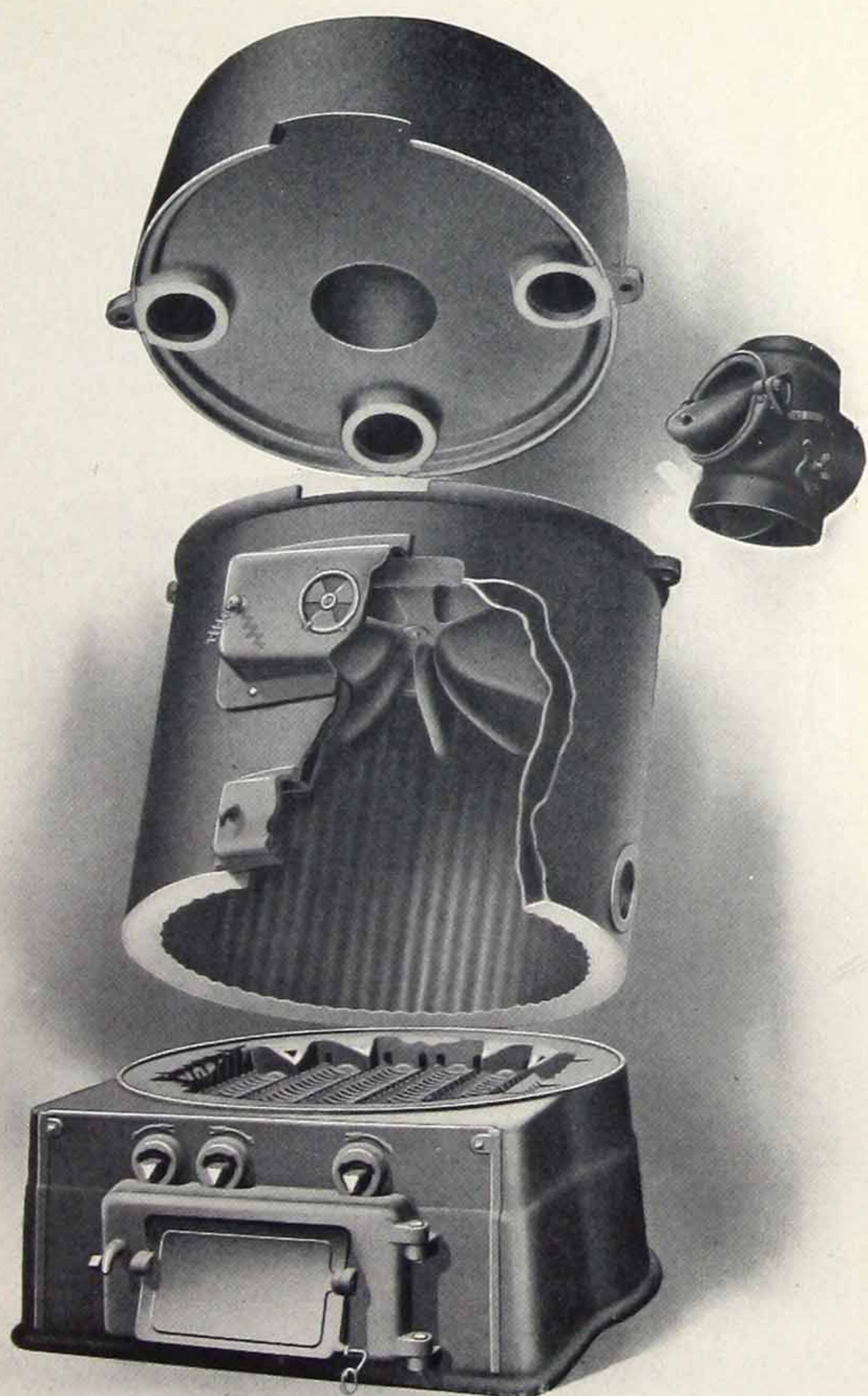
Interior

Nos. 123 and 126

Menlo Boiler



# Menlo Boiler



Interior

Nos. 23 and 26

Menlo Boiler



# Menlo Boiler

## Regular Tapping\*

| Number | Supply            | Return     |
|--------|-------------------|------------|
| 10     | 1-2"              | 3-2"       |
| 12     | 1-2"              | 3-2"       |
| 14     | 1-2½"             | 3-2"       |
| 16     | 1-3", 2-1½"       | 1-3", 2-2" |
| 18     | 1-3", 2-1½"       | 1-3", 2-2" |
| 20     | 1-3", 2-1½"       | 1-3", 2-2" |
| 23     | 2-3", 2-1"        | 2-3"       |
| 123    | 2-3", 2-1"        | 2-3"       |
| 26     | 2-3", 1-1¼", 1-1" | 2-3"       |
| 126    | 2-3", 1-1¼", 1-1" | 2-3"       |

## FIRE TOOLS FURNISHED

Nos. 16, 18 and 20—Poker.

Nos. 23, 123, 26 and 126—Poker and flue brush  
with handle.

## TRIMMINGS FURNISHED WITH STEAM BOILERS

Pop safety valve.

Steam gauge with cock.

Water column complete.

(2-¾" Gauge Cocks.)

(1 pair water-gauge cocks with glass.)

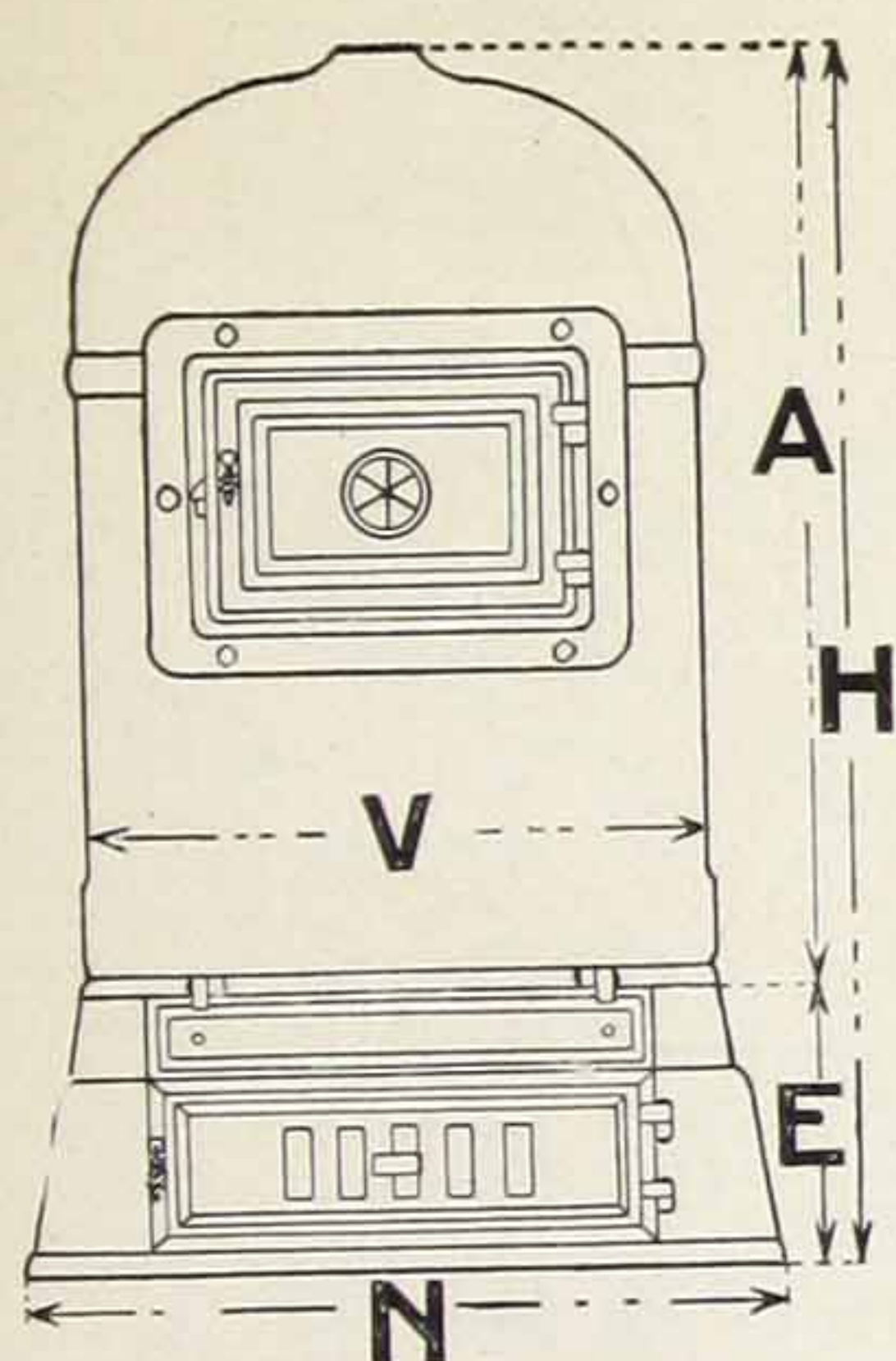
Diaphragm complete with chain.

Pipe and fittings for connecting steam trim-  
mings.

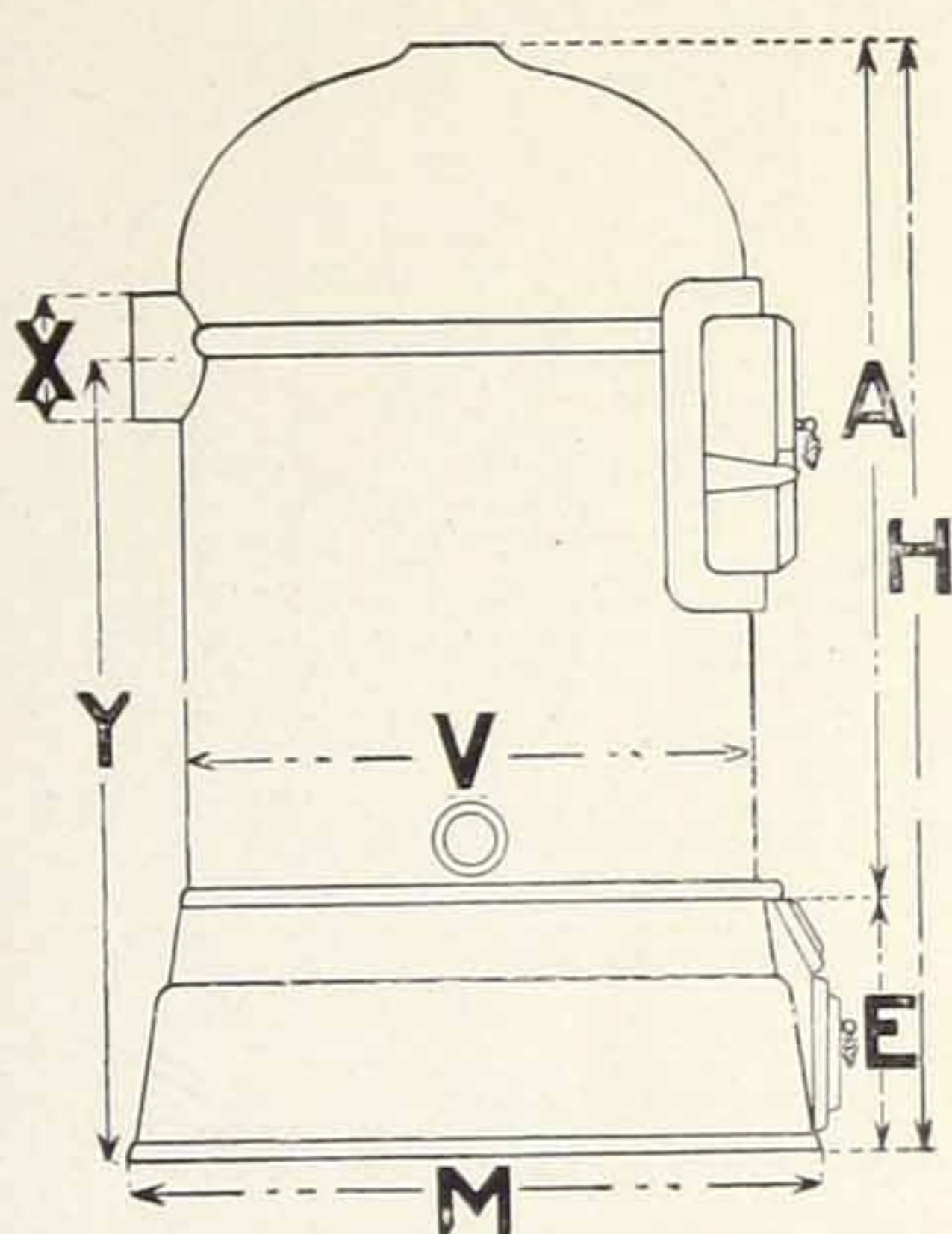
\*If Boiler is to have special tapplings, so specify on order.



# Menlo Boiler



Front  
Elevation



Side  
Elevation

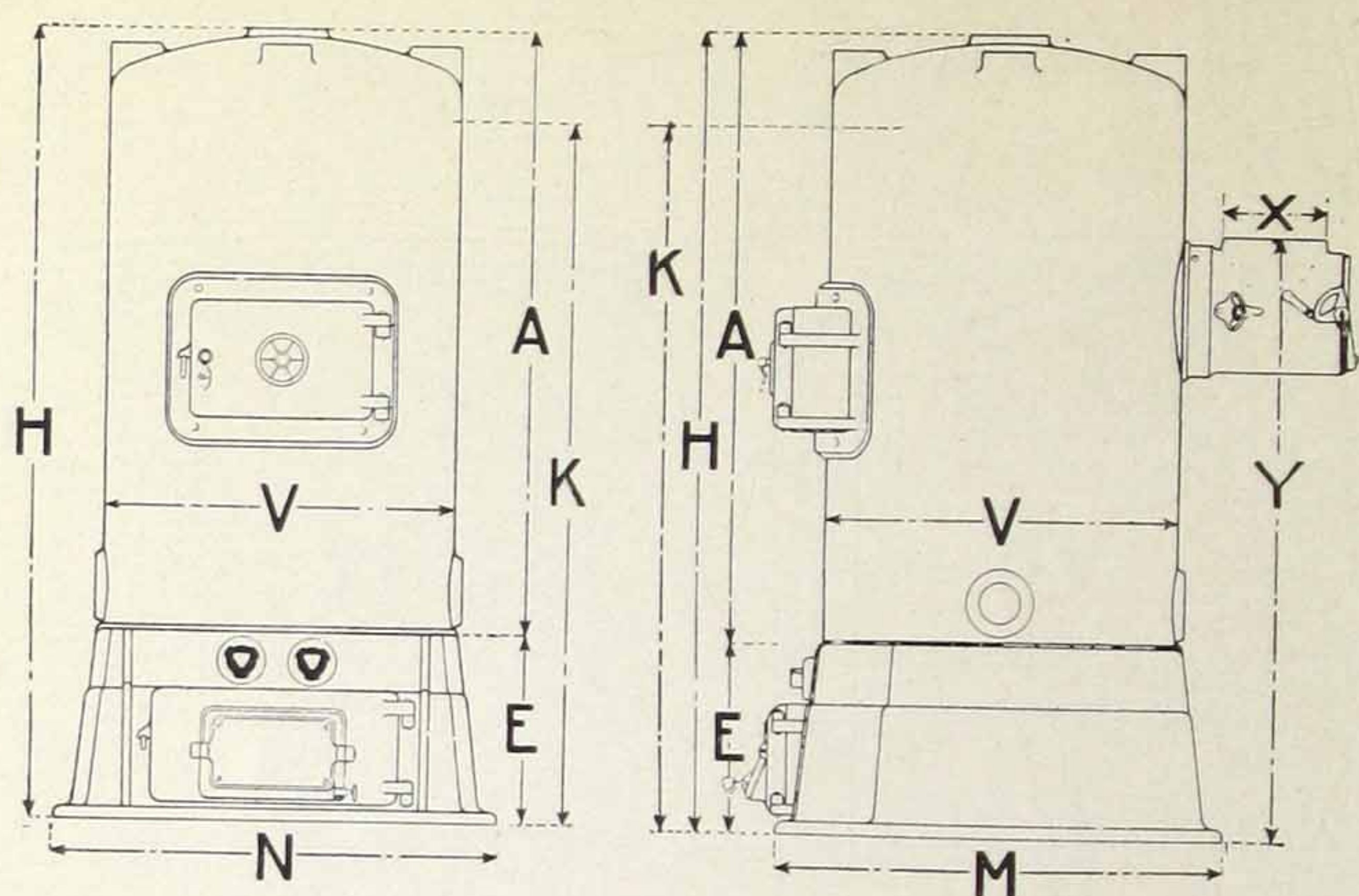
Nos. 10, 12 and 14  
MENLO

## Dimensions in Inches

| Number  | 10  | 12  | 14  |
|---|-----|-----|-----|
| A Height of Dome . . . . .                    | 24  | 25½ | 27  |
| E Height of Ash Pit . . . . .                 | 8   | 8   | 8   |
| H Total Height . . . . .                      | 32  | 33½ | 35  |
| M Length at Floor . . . . .                   | 19½ | 22  | 24½ |
| N Width at Floor . . . . .                    | 19½ | 22  | 24½ |
| V Diameter of Dome . . . . .                  | 15  | 17½ | 20  |
| X Diameter of Smoke Pipe . . . . .            | 5   | 5   | 6   |
| Y Height to centre of Smoke<br>Pipe . . . . . | 25  | 26  | 29½ |



# Menlo Boiler



Front  
Elevation

Side  
Elevation

Nos. 16, 18 and 20

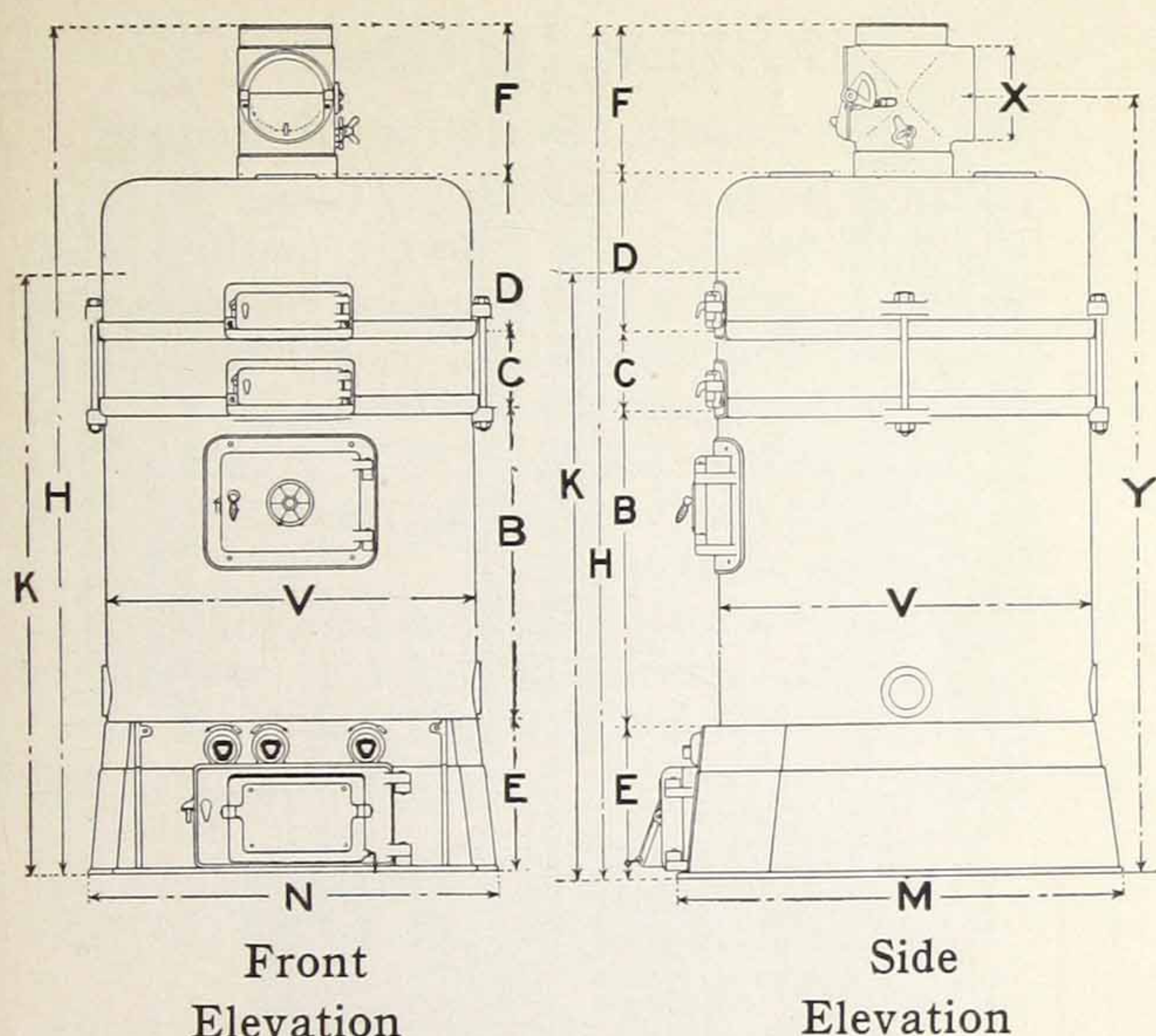
MENLO

## Dimensions in Inches

| Number                                     | 16               | 18               | 20               |
|--|------------------|------------------|------------------|
| A Height of Dome . . . . .                 | 38               | 38               | 39               |
| E Height of Ash Pit . . . . .              | 12               | 12               | 12               |
| H Total Height . . . . .                   | 50               | 50               | 51               |
| K Height of Water Line . . . . .           | 44               | 44               | 45               |
| M Length at Floor . . . . .                | 26 $\frac{3}{4}$ | 28 $\frac{3}{4}$ | 30 $\frac{3}{4}$ |
| N Width at Floor . . . . .                 | 26 $\frac{3}{4}$ | 28 $\frac{3}{4}$ | 30 $\frac{3}{4}$ |
| V Outside Diameter of Dome                 | 22               | 24               | 26               |
| X Diameter of Smoke Pipe . . . . .         | 7                | 7                | 8                |
| Y Height to centre of Smoke Pipe . . . . . | 33 $\frac{1}{4}$ | 33 $\frac{1}{4}$ | 33 $\frac{1}{4}$ |



# Menlo Boiler



Nos. 123 and 126

MENLO

## Dimensions in Inches

| Number                                     | 23               | 123              | 26              | 126             |
|--|------------------|------------------|-----------------|-----------------|
| B Height of Fire Pot . . . . .             | 25               | 25               | 26              | 26              |
| C Height of Intermediate Section . . . . . |                  | 6                |                 | 6               |
| D Height of Dome . . . . .                 | 12               | 12               | 12              | 12              |
| E Height of Ash Pit . . . . .              | 14               | 14               | 14              | 14              |
| F Height of Smoke Bonnet . . . . .         | $11\frac{3}{4}$  | $11\frac{3}{4}$  | $11\frac{3}{4}$ | $11\frac{3}{4}$ |
| H Total Height of Boiler . . . . .         | $62\frac{3}{4}$  | $68\frac{3}{4}$  | $63\frac{3}{4}$ | $69\frac{3}{4}$ |
| K Height of Water Line . . . . .           | $45\frac{1}{4}$  | $51\frac{1}{4}$  | $46\frac{1}{4}$ | $52\frac{1}{4}$ |
| M Length at Floor . . . . .                | $35\frac{5}{16}$ | $35\frac{5}{16}$ | $38\frac{1}{2}$ | $38\frac{1}{2}$ |
| N Width at Floor . . . . .                 | $33\frac{7}{8}$  | $33\frac{7}{8}$  | 37              | 37              |
| V Outside Diameter of Fire Pot . . . . .   | 28               | 28               | 31              | 31              |
| X Diameter of Smoke Pipe . . . . .         | 8                | 8                | 8               | 8               |
| Y Height to Center of Smoke Pipe . . . . . | $57\frac{3}{4}$  | $63\frac{3}{4}$  | $58\frac{3}{4}$ | $64\frac{3}{4}$ |

Shipped Knocked Down



# Menlo Boiler

## BOILER RATING

### Basis for Computing Size of Boilers

1. STEAM BOILER ratings are based on maintaining two pounds pressure at the boiler.
2. WATER BOILER ratings are based on the water being maintained at a temperature of 180 degrees at the boiler.
3. SUFFICIENT RADIATION must be installed to easily raise and maintain a temperature of 70 degrees.
4. RATINGS are for cast iron DIRECT radiators with average amount of surface in MAINS, RISERS and RETURNS.
5. Usual ALLOWANCE must be made for the use of PIPE COILS, WALL RADIATORS, DIRECT-INDIRECT, INDIRECT RADIATION and CONTINGENCIES.
  - (a) PIPE COILS OR WALL RADIATORS. Each foot of surface is considered equivalent to  $1\frac{1}{2}$  feet of direct radiators.
  - (b) DIRECT-INDIRECT RADIATORS. Each foot of surface is considered equivalent to  $1\frac{1}{2}$  feet of direct radiators.
  - (c) INDIRECT RADIATORS. Each foot of surface is considered equivalent to  $1\frac{1}{2}$  feet of direct radiators.
  - (d) COIL or WATER BACK for warming water (domestic supply). Each gallon storage capacity is considered equivalent to 2 feet of direct steam radiators, or 3 feet of direct water radiators.
6. ALL PIPING (supplies, returns, risers, etc.) is to be figured as radiating surface.
  - (a) Under USUAL CONDITIONS an allowance for PIPING and FACTOR OF SAFETY is considered equal to approximately 50% of the NET amount of DIRECT radiators (see paragraph 5).
7. LISTED RATINGS of boilers are determined by adding 50% to the NET amount of DIRECT cast iron RADIATORS exclusive of PIPING (see paragraph 5).
  - (a) The above 50% addition is equivalent to a deduction of  $33\frac{1}{3}\%$  from listed ratings.
8. RATINGS are based on ANTHRACITE COAL as fuel.
  - (a) If BITUMINOUS COAL is to be used it is good practice to add about 10% to size of Boiler.



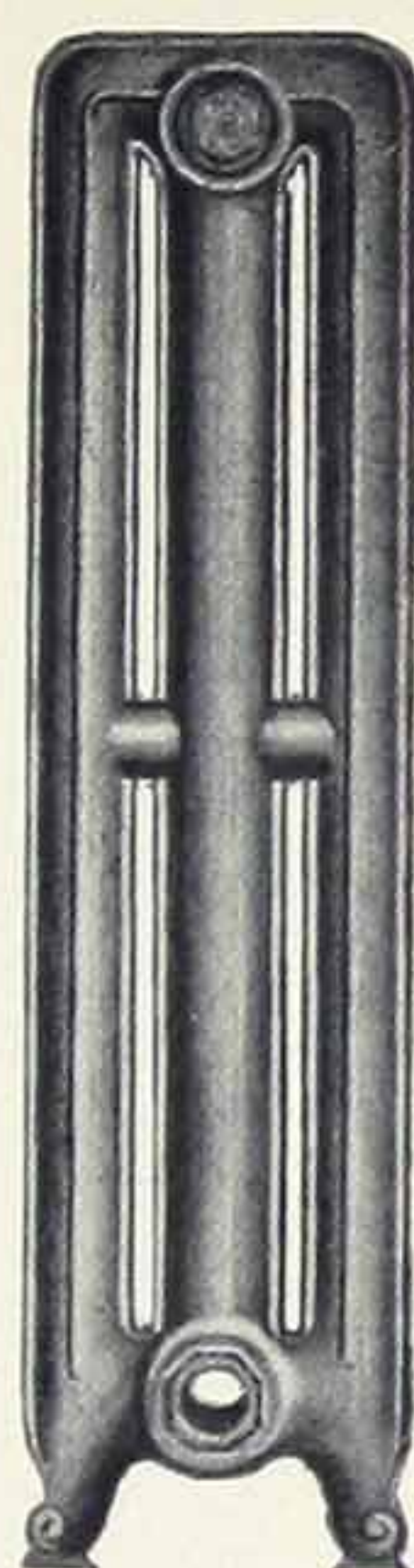
# Princess Radiators



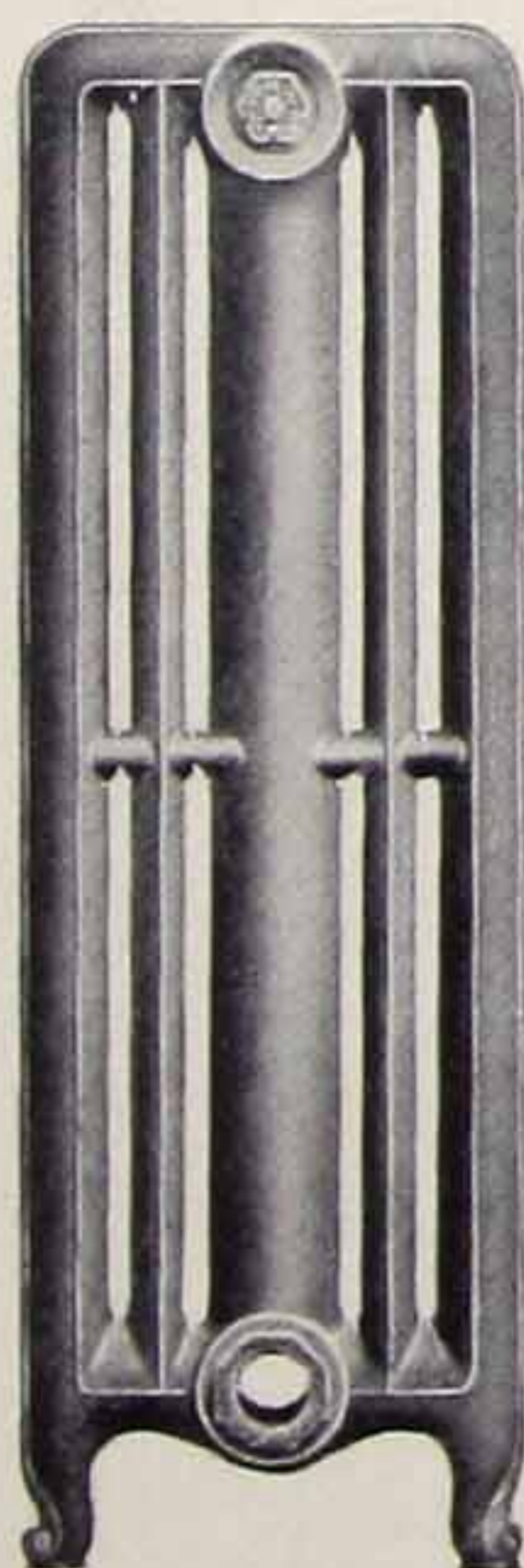
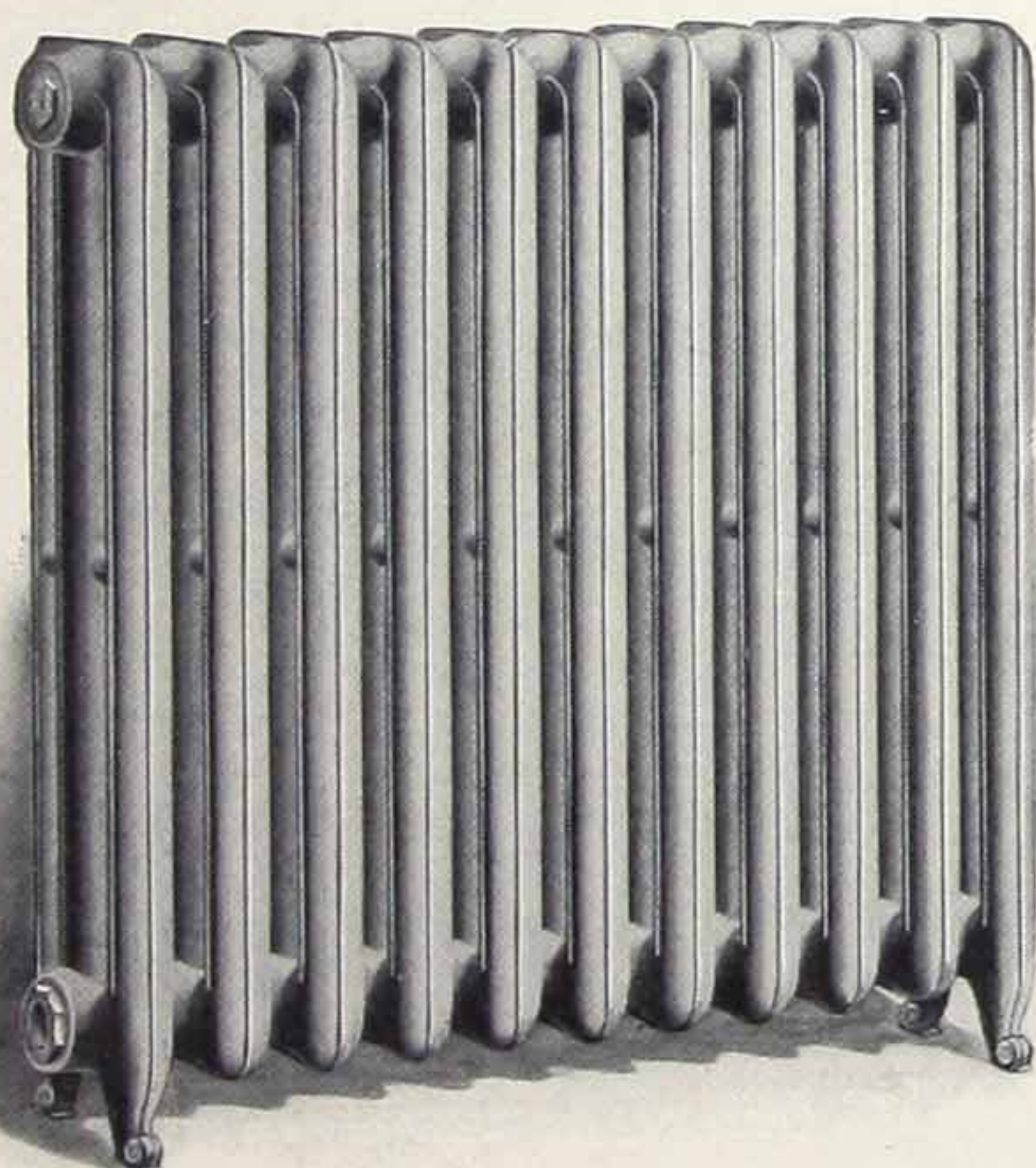
Single-Column



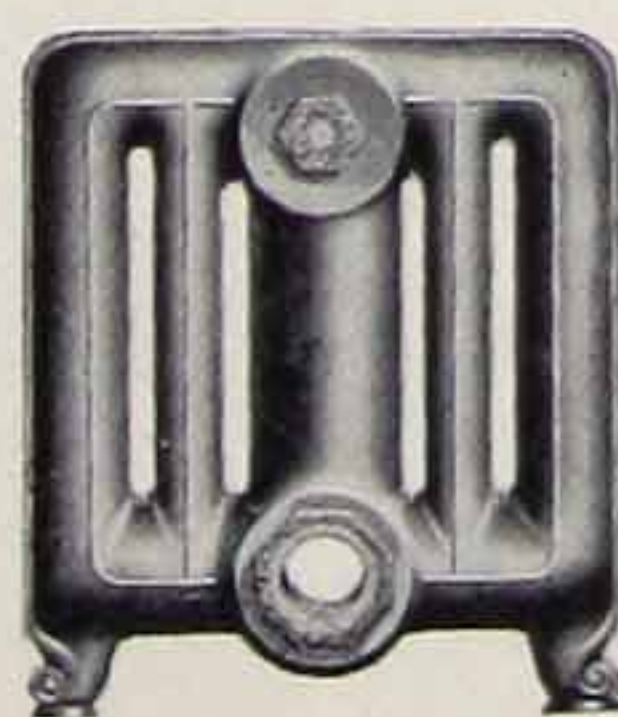
2-Column



3-Column



5-Column



5-Column  
Window Radiator



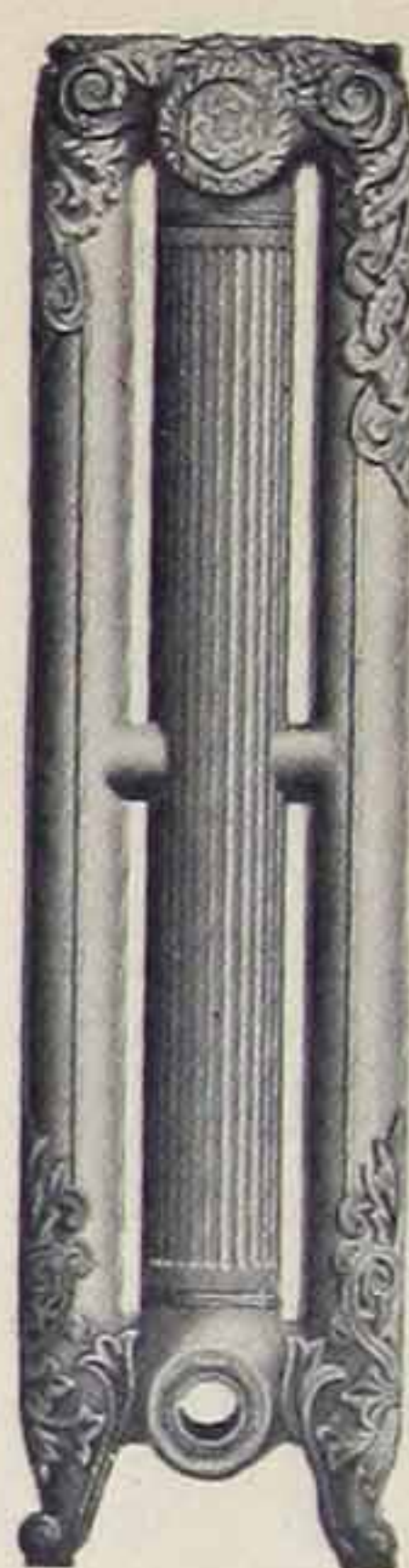
# Imperial Radiators



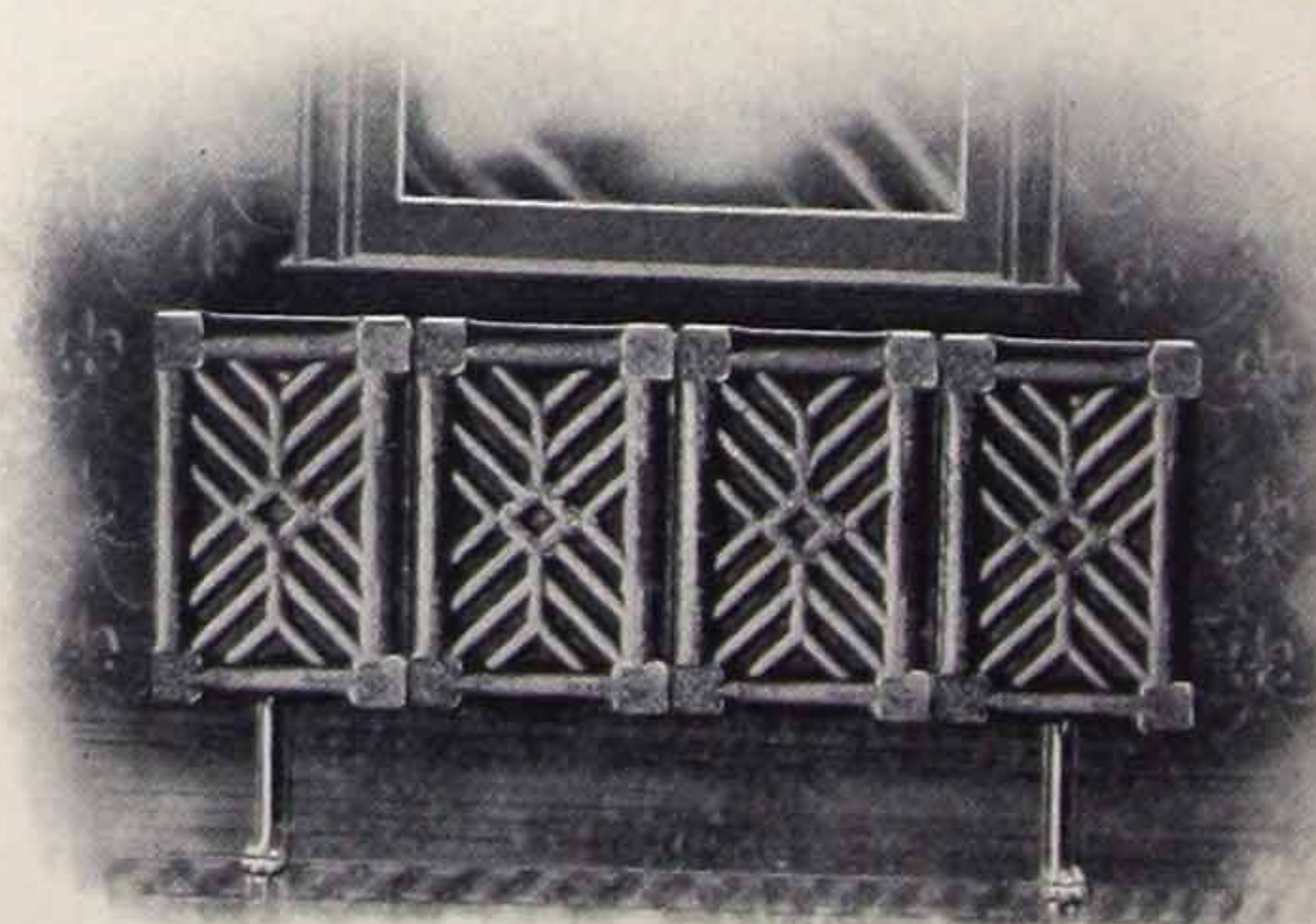
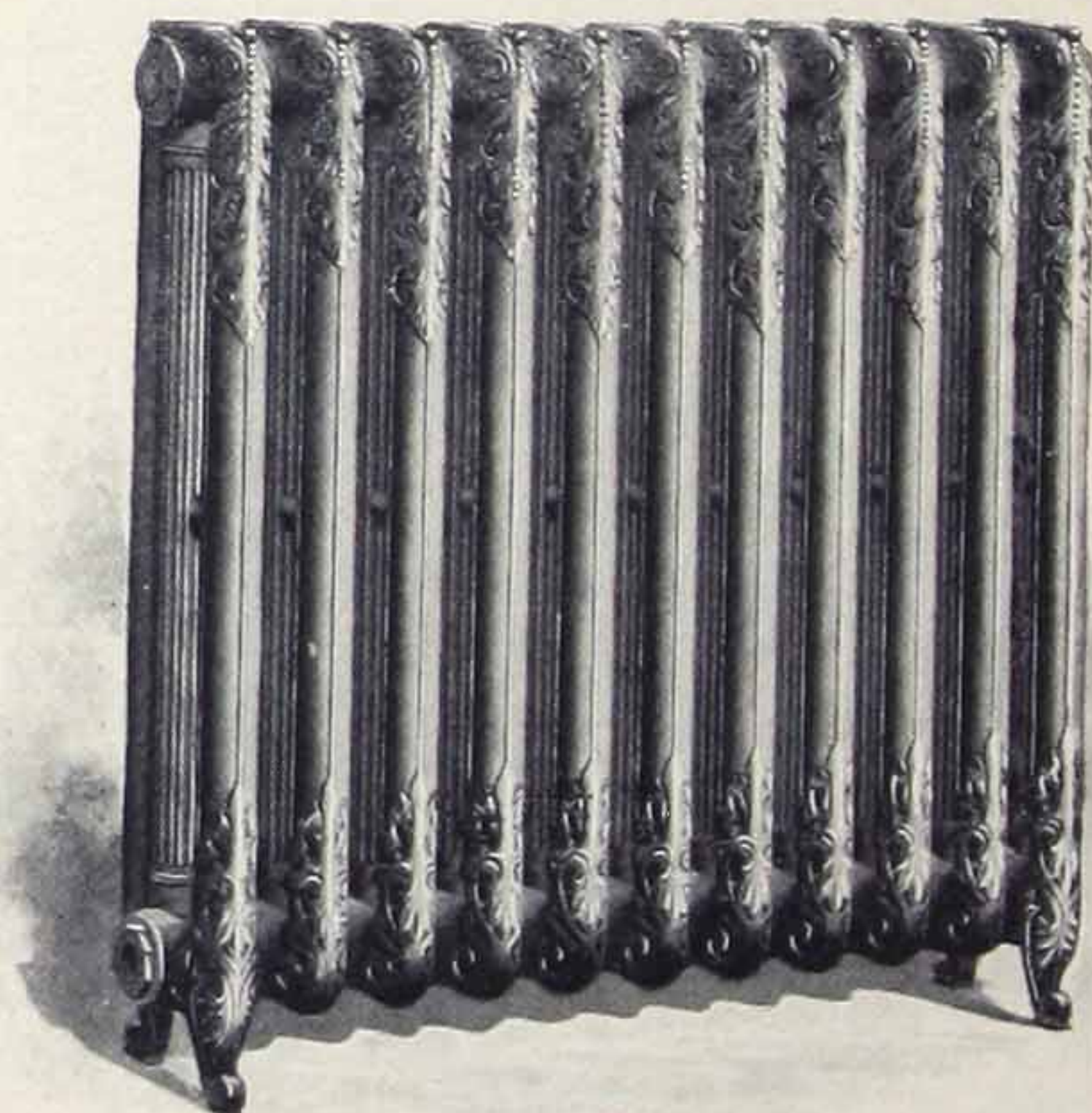
Single-Column



2-Column



3-Column



X-Ray Wall Radiator  
1 x 4—8 Foot



# Menlo Boiler

## Ratings and Prices

| Number | STEAM              |       | WATER              |       |
|--------|--------------------|-------|--------------------|-------|
|        | Rating*<br>in Feet | Price | Rating*<br>in Feet | Price |
| 10     | ...                | ...   | 200                | \$55  |
| 12     | ...                | ...   | 300                | 70    |
| 14     | ...                | ...   | 400                | 95    |
| 16     | 300                | \$149 | 500                | 139   |
| 18     | 375                | 180   | 600                | 170   |
| 20     | 475                | 216   | 800                | 206   |
| 23     | 550                | 236   | 900                | 226   |
| 123    | 600                | 249   | 1000               | 239   |
| 26     | 675                | 293   | 1125               | 283   |
| 126    | 750                | 316   | 1250               | 306   |

\*For computing size of Boiler, see page 18.